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ABSTRACT

This is a critical review of adult education facilities in the realm of formal education (elementary and high schools, junior colleges, colleges and universities), as well as in business and industry, churches and synagogues, community organizations, government agencies at all levels, the armed forces, and proprietary schools (correspondence and other types of private, profit-making schools). It is emphasized that the formal system of schools and universities is not the chief provider of adult education, and that the problem of facilities must be considered in business and industry and a wide array of other organizations in which education is a vital instrumental function but not the primary purpose. Various implications and unanswered questions are raised. Also included are five general references, a 50 item annotated bibliography, notes on availability and document ordering, and a list of other ERIC/AE publications. (ly)

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PHYSICAL FACILITIES IN THE EDUCATION AND TRAINING OF ADULTS

Memorandum on Sparse Research and Development Literature

Roger DeCrow

10 March 1970

ERIC Clearinghouse on Adult Education

ED 036 677

ERIC CLEARINGHOUSE ON ADULT EDUCATION

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PHYSICAL FACILITIES IN THE EDUCATION AND TRAINING OF ADULTS

Memorandum on Sparse Research and Development Literature

10 March 1970

TO: Adult Education Association Commission on Planning Adult Education Systems, Facilities and Environments

FROM: Roger DeCrow, ERIC Clearinghouse on Adult Education

Here is a brief analysis of what I found in a search through some 6,400 documents from recent years for intelligence on the important matter of physical facilities for the education and training of adults.

The attractive, but inconsequential, pamphlet put out by this Commission's predecessor in 1952 is still the standard reference on this subject and, in fact, even in 1970, practically the only reference.

So, I was surprised to see a small abundance of documents roll out of our files as a result of the ERIC depth indexing during the past three years. Without this indexing I think practically none of these documents would have been found, since the discussion of physical facilities is subsidiary and often incidental to other more prominent topics in most reports.

I hoped that some inventory of salient problems might emerge, since I believe a first task of the Commission will have to be some way, somehow, to analyze and specify the problems. With even a shaky grasp of the nature and

scope of the problem in hand, we all agreed that technical information on such matters as construction, light levels, classroom layout, etc. is readily available and could be quickly tailored to the particular problems of adult education.

So I looked through these documents for problems; I did not cross over into the vast educational facilities literature seeking technical information or solutions; I also put aside material about educational television, use of complex audio-visual equipment and other important activities implied by the term "systems" in the title of the Commission.

I will make a terse summary of the little I found, organized by sponsoring agencies in the order of the volume of adult education and training they provide according to estimates from the National Opinion Research Center and others. This form of organization is intended, partly, to emphasize that the formal system of schools and universities is not the chief provider and that the Commission will need to consider facilities problems in business and industry and in a wide array of agencies where education is a vital instrumental function, but not the primary purpose of the agency. The few documents with any substantial, useful information are listed in the bibliography with abstracts or annotations. All other entries, those with citations only, are documents I find so trifling (on this subject) that it would waste time for anyone else to dig them up again. Quotations carry much of the substantive content of this review.

In many areas where I found nothing, and everywhere I have no particular expertise, I have sometimes put down a bit of what you might call speculative opinion, for the meager results of the search set off a bout of soulful rumination in ERIC/AE staff. Finally, still focusing on how to improve understanding of the problems of physical accommodation in adult education, I list some small scale investigations which occurred to me as possible parts of the Commission's action campaign.

OVERVIEWS

Simply for the record I list the general references I have found. None is substantial enough to be of much use. And, seeing now how little is known about physical facilities, I understand why discussion must be so vague and general. The 1952 AEA publication is essentially a collection of floor plans from various community facilities, not directly adult educational in nature.

The NORC participation study is still the best for grasping the general lay-of-the-land in adult education. It sorts out the pattern of who studies what, for what purpose, by what method, in what agency, etc. with admirable clarity. Though the data have changed since 1962, the general patterns are the same. Other participation data and estimates are available in ERIC/AE, should they be needed.

ARCHITECTURE FOR ADULT EDUCATION. A GRAPHIC GUIDE FOR THOSE WHO ARE PLANNING PHYSICAL FACILITIES FOR ADULT EDUCATION.

Becker, John W. Adult Education Association of the U. S. A., Washington, D. C. EDRS Order Number ED 018 942; price in microfiche $0.50, in hard copy $3.85. 75 pages

HIGHER ADULT EDUCATION IN THE UNITED STATES: THE CURRENT PICTURE, TRENDS AND ISSUES.

Knowles, Malcolm S. American Council on Education, Washington, D. C. Committee on Higher Adult Education. Available from American Council on Education, One Dupont Circle, Washington, D. C. 20036. $3.00 124 pages 1969

TRAINING AND DEVELOPMENT HANDBOOK.

Craig, Robert L., ed. and Bittel, Lester R., ed. American Society for Training and Development, 1967. McGraw-Hill Book Company, N. Y. 650 pages.

INDUSTRIAL TRAINING HANDBOOK.

Barber, John W., ed. Available from A. S. Barnes & Company, Box 421, Cranbury, N. J. 08512. 407 pages. 1969.

VOLUNTEERS FOR LEARNING, A STUDY OF THE EDUCATIONAL PURSUITS OF AMERICAN ADULTS. (National Opinion Research Center monographs in social research).

Johnstone, John W. and Rivera, Ramon J. National Opinion Research Center, Chicago, Ill. 1965. Aldine Publishing Company, Chicago, Ill. 624 pages.

ESTIMATES OF COURSES (CLASSES, LECTURES, DISCUSSION) ATTENDED AT DIFFERENT SPONSORING INSTITUTIONS

Sponsoring Institution	Per Cent	Estimated Number of Courses Attended at Different Institutions
Churches and synagogues	21	3,460,000
Colleges and universities	21	3,440,000
Community organizations	15	2,450,000
Business and industry	12	2,040,000
Elementary and high school	12	1,920,000
Private schools	7	1,220,000
Government (all levels)	7	1,180,000
Armed forces	4	580,000
All other sponsors	2	250,000
Total	101	16,560,000
Don't know or no answer		
Total courses		16,560,000

(29, p. 61)

Where do adults go to take courses? Although high schools, colleges, and universities are highly influential in adult instruction, our inventory of learning activities revealed that more adults study outside the regular school system than within it--by a ratio of about two to one. Moreover, we estimated that 56 percent of all studies involving attendance at classes, lectures, or group discussions took place in institutions whose primary functions were not educational, such as churches and synagogues, private businesses, YMCA's, government agencies, the armed forces, and community institutions other than schools or adult education centers. In terms of over-all number, more adults had studied in churches and synagogues than in any other type of institution. As one would expect, of course, this instruction was confined almost exclusively to religious training.

One important feature of the learning experience of adults, then, is that it takes place chiefly in institutions whose main concerns are with functions other than education (30, p. 5).

INSTRUMENTAL EDUCATION-GIVING AGENCIES

Most adult education experiences, even most organized classes, discussion groups and lectures, are provided by a battery of agencies in which education or training is a secondary, derivative or instrumental purpose in support of other major objectives of the agency.

Business and Industry

First among these instrumental education-giving agencies in bulk of provision is American business and industry, engaged in the post-war period in massive, across the board, emergency up-grading of the entire labor force. When training by "on-the-job" methods of orientation, coaching, sit-by-me, etc. is added to the more formally organized courses, classes, conferences, etc. business and industry clearly is the largest adult education provider.

What are the main forms of this provision and what can we glean from the literature about the physical facilities and environments used or needed for this work?

On-the-job training. We must assume from the meager references to training facilities that most of this in-plant training takes place in the actual work areas and presents little problem of space or facilities and that this is true even when the training is extensive, with conscious planning and organization, as, for example, in apprenticeship or executive training through job rotation (15, p. 48).

Courses, Classes, Conferences. Enterprises of any size typically have a "training center" ranging from a designated corner of the plant to university campus-like facilities, such as the General Motors Institute, often featuring extensive integration of programmed learning, audio-visual and other learning resources with more conventional classroom, conference and sometimes residential facilities. I find no systematic study of these training centers and their problems. There is, however, a rather constant flow in the training periodicals of low level descriptive material. The typical article is two or three pages of description with pictures of the facade or, occasionally, floorplans (15, pp. 32, 36).

Educational needs. Business and industry exhibit an intense and widespread concern about their educational needs. They are distressed about the knowledge explosion, about skill and professional obsolescence, and about the manpower shortage.

William L. Bowden, testifying for the American Council on Education, stated that human obsolescence is one of the largest challenges of our day. Ten years from now there will be 22 million adults employed in professional-technical-managerial jobs; 19.9 million in clerical and sales jobs; and 38.8 million in foreman-craftsman-operational-skilled service jobs. The 80.6 million adults in these three major employment categories will require continuing education to keep their knowledge and skills updated (36, pp. 3-4).

Costs. The report concludes that despite the fact that business and industry are probably the major purveyors of

some kinds of continuing education for adults in the United States no accurate figures or even estimates of the number of programs, enrollment in programs, or of the expenditure of funds for such programs are available.

The Chase Manhattan Bank of New York, in a 1962 report, estimated that some $17 billion of resources would be devoted to "education by business" that year. A number of diverse activities were included in this total such as: formal programs and informal training which may take place during business hours or after work, in plants, offices, in-company, or out-of-company classrooms with instruction given by supervisors, training staff members or outside experts and teachers (36, p. 8).

Business and Industry

Costs. Sperry Gyroscope in 1964 had 1,800 employees working at all degree levels plus 900 more at in-house programs. One company which makes tuition deferred payments in lump sums directly to colleges and universities spent three-quarters of a million dollars domestically in 1965. Another company is just about ready to build its own air-conditioned schoolhouse that will include living quarters for 300 and 85,000 square feet of space for 25 classrooms, laboratories, library, 250-seat auditorium, training rooms, etc., for only part of its educational program. The industry leader, IBM, used the figure $75 million as its 1966 outlay for educational programs within the United States. This figure represents primarily instruction costs and does not include informal training for branch customers, which would be a minimum of $10 million more (36, p. 9).

General Motors. The central educational agency of General Motors Corporation is the General Motors Institute (GMI). Under the aegis of GMI are the forty-year-old engineering college, continuing-engineering and management-development programs for employees of General Motors, and a part-time evening program, supplementing the courses offered by other local colleges, for residents of the Flint, Michigan area. General Motors calls GMI the largest industry-related educational institution in the world.

The total budget of the General Motors Institute in 1965 was between $8-9 million. Four million dollars came from the company, the rest from tuition of the engineering students, part-time students, and the management training services (36, p. 29).

IBM. Facilities and personnel requirements essential to these ambitious education and training programs are many. The division maintains three major-plant-site educational centers at Poughkeepsie and Endicott, New York, and in San Jose, California. There are twenty-seven district-education centers in major cities, each staffed by ten to thirty-five instructors and managers. About 150 IBM branch offices have education facilities, usually with two to six classrooms (36, p. 19).

Western Electric. The educational centers located in New York City and Winston-Salem, North Carolina are equipped with facilities for various types of activity: classrooms, conference rooms, laboratories, library and reading areas, and cafeteria. Classrooms can accommodate a maximum of

twenty-four students, and are equipped with the latest audio-visual aids such as tape recorders, Vu-graphs, slides, and motion picture projectors.

A representative library of reference texts, basic periodicals, and booklets needed to supplement Western Electric's training and research programs is maintained in each training center. All books and journals are located on open shelves, making the publications easily accessible.

Each laboratory is equipped with electronic test equipment, electrical measuring instruments, and machine tools necessary to enable students to do classroom and experimental work. Computer equipment in operation respectively at the New York and Winston-Salem Centers include an IBM 1130 Computer and a General Precision LGP-30. These facilities will provide students with desired hands-on-time for the solution of computer-oriented problems (36, p. 15).

Recent years have seen a spectacular growth of similar facilities provided on a commerical basis by hotels, motels and residential centers such as Airlie House, and in program and facility provision by professional and trade associations. Browsing turns up passing mention of several factors which must be problems in various situations. For example:

1. Concentration or dispersion of training programs and facilities in large corporations operating at many sites.
2. Company provision versus use of "outside" facilities provided by universities, trade and professional societies and commerical providers.

3. Rational division of labor between companies and the vocational schools.
4. Sharing facilities, especially in companies too small to mount large scale training programs.
5. Designing the correct mix and meld of mechanized and personal learning methods.
6. Cost assessment.

Kepner-Tregoe. Kepner-Tregoe has over 200 companies as clients in the United States and Canada, as well as in Latin America, Europe, and the Far East--a total of over 25,000 persons having completed one of the courses. Of a total staff of seventy, there are thirty-five professionals, recruited from industry, not universities. The main offices are in Princeton, with other offices in Cleveland, Detroit, Chicago, Los Angeles, London, Weisbaden, and Mexico City.

KTA has cooperated with some eight to ten universities by permitting them to sponsor one of their courses as a non-credit offering, usually in the extension division. Kepner-Tregoe charges the university a fee for each participant, and the university adds to that an amount necessary to cover its costs. Companies that cannot arrange to have a KTA course in-house because of the difficulties of freeing twenty key executives from their jobs at one time, take advantage of these "public" courses. There is an advantage, however, for the company that can sponsor its own program: KTA spends part of the time on the special problems of the company as well as advising on the follow-up so as to assure maximum results on the job (36, pp. 59-60).

American Management Association. The American Management Association in 1965 sponsored between seventeen and eighteen hundred meetings with an attendance of about 45,000 with 53,000 in 1966. Full-time employees number 500, with a professional program staff of thirty-two. There were about 4,500 persons serving in some volunteer teaching capacity in 1965. This figure does not include the Thunderbird Campus (36, p. 54).

Use of university programs. Instead of sponsoring an in-house engineering school as does General Motors, Ford relies on cooperative arrangements with many colleges and universities. At the undergraduate level, the College Cooperative Program enrolls nearly 700 students attending some 40 universities. Ford anticipates considerable future expansion in this program. At the graduate level are several programs which permit employees to finish their master's degrees, including an Advanced Education Fellowship Program in mechanical engineering, which permits selected employees to complete their master's degrees at the University of Michigan Dearborn Campus. In addition, the Company's Continuing Education Plan generated 18,000 salaried enrollments in after-hours courses at various colleges and universities in the United States in 1966, and 3,000 enrollments were generated under a similar program for hourly employees (36, p. 32).

Cost accounting problems. One of the larger companies did not have any comprehensive statement that described its range of education programs, nor did it have the resources to prepare one on short notice. It was on the agenda as a future project. It is difficult to choose which programs

to include: when is a program on-the-job, when is it apprentice, formal education, etc.? Even when a particular program is to be costed, what should be included? As an example, when the costs of a two-week executive development program are totaled, the tuition, travel, room and board are obvious, but not so time lost on the job or the cost of a replacement, etc. A related problem would be to get some degree of uniformity so total costs from one company would mean the same as those from another company (36, p. 9).

Centralization versus dispersion. But centralizing training in one facility raised problems which other training directors have wrestled with--where would the location be? Where should the trainees live? How do you justify the expense of a training center if the seats aren't kept warm all year? Butler's answers represent a workable solution for an organization that must provide training for 3,300 people during an off-season period.

Butler persuaded a motel in Kansas City to build a wing onto their facility (a Butler building, of course) and lease it back to the company for a training center. Trainees live at the motel and study at the center. They can get to downtown KC, Butler's general offices, and the airport in minutes. It is a convenient location (almost the center of the country), without a housing problem (32, p. 32).

Churches, Synagogues

Amazement followed the NORC revelation of the volume of organized adult learning carried on under church auspices;

there is every reason to believe this activity has increased in recent years; I suspect that the ratio (90 percent) of specifically religious content has declined as many churches become active in community and poverty related programs. In the burgeoning literature about this work, I find nothing describing the facilities involved.

Though not particularly expert in this area, I will nonetheless venture some speculation. Most of this learning activity takes place on church premises; recent years have brought a building boom (it appears to me) and many well designed modern churches are, in effect, community centers with every imaginable type of room and facility, including kitchens, dining halls, gymnasiums, etc. I speculate that the biggest improvement in adult learning quarters in recent years may be in these churches. Looking around Syracuse, I notice that some of these are extensively used by a wide range of community groups for many purposes including educational ones. Many, however, are not used for these purposes so far as I can detect. Since all churches are tax-exampt they involve public subsidy, implying, to my mind at least, some slight right on the part of the citizen to wonder if these facilities are used efficiently. It would make an interesting study, I believe, in almost any local community, to match an inventory of space needed for adult education against unused space in churches.

Some churches also operate separate community centers, the Jewish Community Centers come to my mind, seething with activity largely youth oriented, but serving many adult learning purposes as well. Some operate large, organized

adult education programs on a community wide basis, often involving parochial school facilities. The Catholic archdiocesan program in Chicago comes to mind as an example. Residential centers or retreats in sylvan settings are owned by some churches.

Finally, salient racial and poverty problems have mobilized church groups in unprecedented involvement in community development activities, including some directly educational programs such as voluntary literacy training. Old inner city church buildings are passing into the hands of community improvement, youth-serving and educational groups. Adult education may inherit facilities in this hand-me-down fashion, just as old school buildings now house many adult basic education and MDTA skill training centers.

Community Organizations

YMCA's, community centers, hospitals and neighborhood health centers, Red Cross chapters and a host of other agencies in any community sponsor a diverse array of adult education programs involving millions of persons in activities too scattered for any summary. All major institutions in American society, national or local, are involved in some form of adult education (28, p. 30).

Again, though there is a growing body of studies mapping these programs in various cities, none of these has looked at the problems of the facilities requirements. The studies of any consequence found in recent years are a small

and random assortment, ranging from the needs in outdoor drama programs (45) to an inventory of literacy programs in voluntary agencies (1). Two of these, I notice, involve hospitals, reflecting the feverish increase in all training related to health problems. A study of educational facilities needs in VA hospitals (20) is by far the most detailed and systematic analysis encountered in this search and might make a good model for similar efforts in other areas (18).

Community agencies. The YMCA's in both cities were also active in providing courses for adults; interestingly, in both cities these courses were concentrated in the same three fields: swimming, dancing, and contract bridge. We found, too, that a majority of the churches in each city provided religious instruction for adults, but that only about one in ten sponsored programs in other fields of learning. Hospitals and medical centers were relatively inactive, although they did provide in-service training for medical technicians and hospital service workers and on occasion sponsored courses in practical nursing for members of the general public. No programs of instruction were found in the public libraries in these cities; one of the cities, however, did house a fairly large municipal art center (30, p. 18).

Libraries may be mentioned here, though I have not investigated the literature on library facilities. NORC could not find many people engaged in organized, sequential learning programs under public library auspices and I think there is still little library adult education in that sense. However, the public libraries carry on a range of education

related activities and are a vital, sorely taxed source of materials for adult education in many other agencies.

There are innumerable agencies, programs and facilities serving older adults. These often, even usually, include some component of education. Adequate quarters for these purposes involve some specialized needs, reviewed in two documents which turned up in this search (25, p. 43).

Housing Senior Centers. Maxwell pointed out that with the increasing number of centers during the recent years some of the centers have been housed in makeshift quarters. She points out that all too often the very nature of the building or rooms reinforced damaging attitudes toward older people, thereby contradicting the very goal the center was attempting to achieve. She goes on to add that there is nothing in the literature to serve as a guide in designing a center.

She points out that:

> The buildings in which centers operate vary markedly. Old houses (Philadelphia, Pa., and Bergen County, New Jersey), old churches (Schenectady, N. Y.), and old school buildings (Hamilton, Ohio) have been and are being renovated. One of the Cincinnati centers is a converted comfort station. New buildings built to the needs and specifications of centers for older people are increasing. They now exist in Santa Monica, Menlo Park, and Pasadena, in California; White Plains in New York. They are in the process of being built in Stockton, California, and Columbus, Ohio. Some exist as a part of a housing project as in Cleveland, Ohio; San Antonio, Texas; and New York. . . .

The Little House Senior Activity Center at Menlo Park, California, probably has some of the finest facilities in the country. This center has been designed exclusively

for older persons. It includes such carefully planned innovations as no steps or raised thresholds, non-skid floors, and no-draft air circulation. It has a number of multiple-use craft rooms (43, p. 20).

Non-resident use of homes for aged. There is a beginning movement to have homes for the aged open their doors to the non-resident. Old age homes with physical plants, facilities, and funds for the care of the aged have a stake in the preventive as well as the custodial care of the older person.

> . . . the program is necessarily limited by the number of older people that can be served and the kinds of services possible. However, a day center program, as part of the homes for aged, can give service to additional hundreds in the homes. Multiform activity programs and related services developed in the day centers can enrich the lives of the residents and the home-care of the older persons, as well as non-residents in the community.

A good example of this is the Blanche Shuldiner Day Center at the Brooklyn Hebrew Home and Hospital for the Aged. (43, p. 22).

Characteristics Needed in Senior Centers. A compilation of all suggestions with regard to facilities would point to a center with the following characteristics: a building distinctly set aside for Senior Citizens; location on the ground floor; air-conditioned, with a large central room for mass programs and a series of small rooms for small group activities. These small rooms may also be used as a library or as a resting room for tired members.

The center should have a front and back entrance where these can be used by both pedestrians and automobile drivers, and the center should be located close to the street. Adequate office space was considered essential. A well-equipped kitchen was requested by all centers; this was to be used both for personal use by individual members, and as a general dining room at other times. The center should have an auditorium with all the stage equipment needed to do an adequate job with dramatic activity. Important on the stage is a series of microphones to pick up the weaker voices of some of the Senior Citizens.

Other suggestions included plenty of storage space, and large rooms for crafts, music, and woodworking (43, pp. 103-104).

Government Agencies

Millions of government workers from the local to the national levels are being trained in programs, somewhat akin to those in business and industry, aimed at up-grading this large and diverse work force. Reports on this work are proliferating in ERIC/AE, but again I am sorry to report none relates to facilities problems. In addition to the stress government agencies are laying on the higher education agencies across the country, I imagine you would find every spare nook in the Federal buildings crammed with in-house programs of which the Department of Agriculture Graduate School is one quick example. Browsing in the program reports suggests that one severe problem is exactly the puzzle of which programs and training needs are best handled through established educational institutions, which require special

in-house programs and how these latter can be organized, where possible, on an inter-agency basis to reduce duplication of effort..

I list two small reports relating to training in correctional institutions which feature touching accounts of remodeling prisons for this purpose (24, p. 33). This is one substantive area of many in which in-service training is developing at a rapid rate. Health related and welfare services are two other vast training areas, but ultimately this training of government workers ranges across every agency and every level from the involvement of indigeneous ghetto persons in New Careers programs to programs limited to U. S. Senators and Federal agency heads at the Secretary and Under-Secretary level.

Prison Conditions. The Hartford State Jail occupies an entire city block in the north end of the city. The main building is an outmoded, antiquated structure well over a century old. It was erected in 1837 and remodeled in 1870 with later additions constructed in 1896 and 1913. The physical condition of the jail is such, that, investigative commissions have, over the years, offered repeated recommendations regarding its closure and replacement.

The cell and dormitory areas are in some instances located in close proximity to the city street, hence there are frequent problems with respect to the smuggling of contraband items, liquor, etc. from persons outside the jail. It is difficult in some sections to keep jail windows intact as inmates break them to look outside, see the girls,

and, etc., although the rules strictly prohibit such activity (33, pp. 4-5).

Prison education facilities. The facilities at Milan are crowded. The institution is designed to care for 550 inmates; during November there were 603.

The facilities for general education are extremely crowded. There are only five general-purpose classrooms and a small library to accommodate the entire academic program. The budget for a new $300,000 general education building was just approved in November. Completion of this structure should solve most of the problems associated with crowded conditions in the general education program.

Existing facilities for vocational training are much more favorable than those for general education. The institution has just constructed a new V. T. building, which has space for five or six different individual shop areas. Materials and excellent equipment are now being added. The facility should be fully operational within the next several months.

Limited facilities for individual study and tutoring are available. Ninety-two inmates live in a Student Honor Center that has individual cells. Most of the inmates, however, live in large dormitory-type rooms with absolutely no privacy (24, p. 55).

Remodeling by donated and inmate labor. Considerable effort was expended by all who were involved in the construction of

this facility. First, a large shop was created in a basement area of the jail. This necessitated the removal and reestablishment of existing storage and supply rooms. Concrete block walls were built and a new concrete floor laid. Numerous, heavy machine tools were then located at other institutions or in storage warehouses. They were moved and installed in the jail shop area, using primarily inmate labor.

Students and instructors from the A. I. Prince Technical School donated a considerable amount of valuable labor in the preparation of the machine shop. They assisted in the pouring and leveling of the new concrete floor. They also dismantled the buss-bar electrical system from the old Wethersfield prison and reinstalled it in the jail shop, where they also connected the machine tools to the system.

Inmates supplied most of the labor in erecting the walls and other structural portions of the Project; also, in painting and renovating the machines. Helpful supervisory assistance was also provided by the Central Jail Administration maintenance personnel.

Almost eight months passed in the construction of the machine shop and on May 9, 1966 the first class commenced (33, p. 26).

Armed Forces

More significant research and development on training and adult education is going on in the military establishment

than in all other parts of adult education combined. When the Commission comes to consider "systems" in adult education, exemplary reports of many technical and vocational programs in the armed forces will provide well worked out models. This work is by no means confined to military specialties, but ranges across many occupational and technical fields. Sustained research has been done, for example, on how to adapt training to Group IV personnel of marginal low aptitude. Cross cultural training problems and others arising from the peacetime use of military force and other interesting areas are under investigation. In addition, much basic research in learning and motivation receives military support.

Even so, no reports focussed on the problem of physical facilities for this giant effort have yet come into our ERIC/AE files, except for one highly technical report on cost accounting as it relates to depreciation of training facilities and equipment (18). I do not question, however, that much useful information has been derived from designing and adapting facilities for military training use. The Commission, early in its efforts, may want to contact the military training personnel and the Project Aristotle effort, an on-going dialog between Federal officials from many agencies and representatives of business and industry. These consultations, aimed at better collaboration between these groups, have included sessions on education and training, especially the design of packaged systems and hardware for this purpose.

Principles for uniform accounting. It is felt that the achievement of uniformity is dependent on closer adherence to the following principles concerning the structure of the program elements.

1. Individual Training and Education Programs elements should be defined so as to yield reasonable manageable segments of the total training effort.
2. Every effort should be made to apply the best available techniques including proration for relating manpower and costs to appropriate program elements.
3. Steps should be taken to provide for uniform definitions of program elements within the Military Services and to have consistent application of resources even though differences in accounting and organizational structures make that difficult.
4. Individual Training and Education Program elements should not include activities which may be considered to be a unit of on-the-job training.
5. The individual training and education aggregation should encompass substantially all individual military training in contrast to training in operational units. (18).

Categories of instructional cost accounting.

1. Cost of direct training.
2. Cost of operation and maintenance of other than real property
3. Cost of operation and maintenance of real property facilities.

4. Pay, Allowances and subsistence of military staff--Instructional
5. Pay, Allowance and subsistence of military logistics, support overhead.
6. Travel staff.
7. Travel students.
8. Other costs.

Amortizing buildings and equipment. The formula to be recommended as a basis for amortization cost of buildings and expensive training equipment.

1. Temporary building - 5 years
2. Semi-permanent - 25 years
3. Permanent - 40 years
4. Equipment - 10 years

There is an awareness of the cost of maintaining amortized buildings and equipment but no attempt was made to determine whether or not it is feasible to account these costs as part of the per capita training cost report.

For all buildings now older than their stated useful life, amorize them (cost out the expense) under an arbitrary ruling. Viz. Take a percent of the amortized cost of the building per year. This would be a small percent of the annual amortized cost. Instead of labeling this amortization call it "cost of annual maintenance and operation" of the building. Further study may be needed to determine percent of yearly amortization cost during the (useful) life of the building to consider as equitable. This same technique could be applied in "costing out" equipment (18).

FORMAL EDUCATIONAL SYSTEM

All parts of the formal school system are, of course, swept up in adult education programs and, with the proliferation of local junior colleges, I expect this area has grown even more rapidly than Johnstone predicted in 1962.

Elementary and High Schools

It is likely that the mix and meld of public school adult education, though greater in bulk, does not much differ in nature from that Johnstone observed in 1962. Some differences are apparent, however, chiefly the presence now of determined and large-scale programs of adult basic education presenting many problems of physical accommodation. New, too, or at least more salient, are the remedial skill and occupational training programs for the disadvantaged operated by the local poverty outfit or the schools or jointly. Area vocational schools and other efforts at cooperation in occupational programs by local community agencies have also increased.

By and large the programs are those given during the day, now taught again in the evening for adults and out-of-school youth. Academic or vocational courses are given in the same building or shop used by the day programs. Some systems supplement this work by informal programs of a hobby nature and some have massive, diverse and creative community curricula in which almost any adult might find something of interest and use.

Essentially, the facilities problem is joint tenancy or sharing of rooms and equipment between the "regular" classes and the marginal activities of the adult program. Several documents describe these problems of finding a place for the night school office, of getting storage cabinets for the night operation, of coordinating schedules and cajoling the janitors to keep the building open.

Here, finally, is a detailed study by Basil Hick which is just what we need in all parts of adult education. He investigated physical facilities needs in public school adult education in the state of New York. For all we may think we grasp the general outlines of a problem, effective remedial action requires just this painstaking enumeration and specification. How else can we know, for example, that the leatherwork class requires thick boards to pound on and that beleaguered adults must carry these sometimes 600 feet, around the fence from the dimly lighted parking lot and back again at end of class. And, many such details seem easily corrected, it seems to me, once the precise problems has been specified. Until more of these studies are done, we will continue to grope about at too high a level of abstraction. Here are some extracts (23). The facilities chapter of the NAPSAE guide for administrators is also quite a good, brief review of the problems (42).

Centralization. An outstanding adult educator states that in cities of less than 200,000 population all adult education programs should be located in one center. The central system has many advantages, such as economy in building facilities; no duplication of teaching equipment is required,

overhead operating costs are lower, fewer administrative and supervisory personnel are required, and travel expenses are lowered. A result of the advantages listed is, of course, a decrease in cost per student hour in as much as the capital outlay expenditures are for one building only. In addition, the morale of the administrative-teaching staff is less often a serious problem because communications are less likely to break down and the opportunity is greater for good teacher-teacher relationships as well as improved teacher-administrator relationships (42, pp. 264-65).

Decentralization. However, there are advantages in placing classes in various locations throughout the city. First and probably the most important is the accessibility of the classes to the public. Students' having classes in their "backyard" tends to build community interest and support as well as increase the enrollment. With outlying centers it is possible to serve more adults, and that is one of the major objectives of adult education. Offerings can be diversified and tailored to meet the needs of a community, and this is also an objective of adult education. A final advantage of the district plan is that of employing instructors from the local community. The Office of Economic Opportunity suggests that classes for the disadvantaged be established in the areas where the students live. In short, take education to the student. Experience shows that this procedure will work. The Mott Program follows such a plan and establishes "Community Schools" in the neighborhood. These daytime facilities for children and youth are then used for adults and families at night (42, p. 265).

Available rooms. Although the number of rooms available in the school building may set the upward limit for the programs insofar as the number of classes which may be offered at any given time is concerned, this available space may also be regarded as a stimulus for the director to enlarge his program until full use is made of the facilities. Opportunity for expansion of the program is not limited primarily by available space even for the "building-bound" director (21, p. 74).

Age of buildings. Most generally, schools which had been built since World War II provided much better adult facilities than did the older ones. However, these also presented difficulties for some classes. In the smaller schools, general shops equipped for several activities had been established. In these, the equipment was limited to accommodate perhaps six students in any one activity. In such cases, much time was lost and often attendance fell off because of this limitation. This was particularly true for ceramics and woodworking classes.

Upholstering classes were held in all types of places. In some schools, this class was not offered because there was no appropriate storage space that could be used. In the older buildings that had basement space, the group often met there (23, p. 75).

Counseling needs. Professional counselors should be employed in the adult education program, and they must be provided with adequate physical facilities. The basic guidance suite consists of the following elements:

1. Large multipurpose area. This area houses academic and vocational information and provides for reading and for waiting to be counseled.
2. Secretary-receptionist area. This area should be contiguous to the multipurpose area. It should be so situated that visitors are easily greeted and assisted.
3. Counselor's office. Each counselor should have an office which is private in every respect. The counselor-counselee relationship must not be affected by extraneous distractions which prevent complete communication from taking place.
4. Testing area. A testing area which is quiet and private should be provided for individual or group testing sessions (42, p. 267).

Office space. The disadvantages of using day school offices far outweigh the advantages. The headquarters of the adult school should be established as a separate, distinct, and autonomous office designed to serve the educational needs of adults. To do this adequately, the administrator must have his headquarters available for his office staff and for his own use from eight to nine in the morning until 10 at night. The administration of the adult education program within a community of 20,000 or more people requires the attention of a full-time certified individual. The office of this community adult school, with its administrator and secretarial staff, can well become the hub or center from which a great community adult education service extends. To use makeshift facilities would show evidence of inadequate planning and operation (47, p. 53).

Parking. Few high school plants provide parking accommodations. When 1,000 to 5,000 adults make use of these plants at night, serious parking difficulties develop. In many instances, the fact of limited parking facilities establishes a limit to the offerings that can be given at one location. Wherever practicable, school authorities will want to consider all possible arrangements that can be made for a well-lighted parking lot adjacent to, if not on, the school grounds. It is true that students, especially women, do not wish to walk three blocks to their parked cars after a class is dismissed at nine o'clock (47, p. 53).

Gate-keepers. It is sometimes forgotten how much the success of a shared arrangement depends upon non-teaching staff. The key figure is the caretaker. Evening, weekend and holiday use of the school buildings places a heavy burden on him, and his reactions cannot be predicted if he is not warned about it at the time of appointment. His attitude is an important element in the success or failure of evening classes (26, p. 38).

Facilities and equipment problems abound in vocational areas and there is an abundance of literature from vocational education on how to design and set up shops and whatever else is needed for these programs, whether in area schools or the local technical high school. I do not know to what extent these work areas take into account the adult student's needs or whether there are, in fact, needs specific to the adult use of these vocational facilities. If so, I much doubt that these special needs are adequately taken into account in the design of the facilities. Massive adult enrollments here, up in the millions, suggest that the "sharing" problems must certainly exist (39, p. 44).

A few other documents add commentary on the public school problem. Learning centers, especially designed for programmed or other forms of self-paced learning, seem successful in adult basic education (21, 26, 46, 47).

No one I check with has ever heard of any public school facility of any kind designed explicitly for adults. Also, in the reports I have scanned it seems that physical facilities is not a major problem in the mind of the public school adult educators. This is one concern, but is well down the priority list. Perhaps, if adults can efficiently use high schools at night, there really is little problem. Presumably there is an almost inexhaustible supply of rooms free at night in schools carefully located to be accessible from all parts of the area served.

The use of elementary schools, however, is certainly questioned and both their physical aspects and psychological connotations are thought to be undesirable. Yet we see a tendency to turn over the old inner city elementary building as quarters for training disadvantaged adults. I have heard adult educators speak with delight of an entire building turned over for adult use. This, they claim, allows a new image of the facility as an adult learning center. Identity quickly develops, they say, and the adults feel at home in their place. Vandalism drops, for this is mommy's school. Nonetheless, the task of remodeling or adapting such places to efficient adult use must be challenging.

Sending the adult back to any school normally used by children of any age is thought by some to be the worst possible tactic; the disadvantaged especially have often had

ugly and unsuccessful experiences in such environs. Learning centers and skill training centers have developed in stores, factories and office buildings, but my observation is that these are always cast off buildings that no one else wants. Common sense assures me there must be great problems in adapting these quarters and I regret that I find no good account of this in the literature.

Vocational facilities. Manpower training is done in many different kinds of places; former elementary schools, well-equipped skill centers, factories and converted factory and warehouse buildings, vocational high schools, and private schools. Some of the training is even conducted at night in manufacturing establishments which are operated during the day for production purposes. The diversity of manpower facilities and the success with which they have been converted to the teaching of modern industrial and business methods is a tribute to the flexibility of the program and the ingenuity of local and State project developers and staff. Training facilities are sought which are clean, well-lighted, centrally located in relation to trainee population, accessible to transportation, and suitable for housing the types of equipment needed in the project. Not all project buildings meet these standards. In most, however, the instructional area has been well subdivided, the rooms are clean, attractive, and well lighted and ventilated. Transportation is a frequently recurring problem which cannot always be solved within the limitations of manpower's temporary and intermittent planning and operations (22, p. 32).

ABE learning centers. The staff thought that the strengths of the Center lie in the relaxed atmosphere, the hours the center is open, and the variety of programs and materials available at each level in reading, math, English, and other subjects offered at the Center. The evaluation also showed that the personalities of the staff members, when dealing with Center participants and with other staff members can be considered as assets. The quality of materials and the teachers' effectiveness in explaining them and helping students are also added strengths. The arrangement of tables and materials allows a majority of space to be available to participants who are studying and allows mobility in the Center with a minimum amount of disturbance to others (46, p. 3).

The weaknesses of the Center by no means overcome the strengths. Some of the noted weaknesses were considered at the beginning of the project. The space in which the Center is located is not adequate, but we chose this site because of a lack of other possible locations. The lack of storage space and space for the display of materials was also noted in the staff evaluations as a weakness. The noise level in the Center, especially in the evenings when a great amount of Spanish-speaking people are present, was mentioned, but we think that we have solved this problem by placing tables for the Language Master and other equipment used for English as a second language classes in the basement and placing the typewriters on the second floor. Some of the staff members think that often the staff is too noisy and that this should be corrected (46, p. 5).

Junior Colleges

Are junior colleges being planned and designed with adult education use in mind? I observe that some of these institutions do their best to evade any responsibility beyond the purest academic program intended to make their transfer students look good at the State University. Even these, however, do dispense this program in the "extended day," i.e., they run night schools for part-time students, many of them adults, a few of them poor. For this we must be grateful (37).

Many are involved in the burgeoning paraprofessional and technical training, rapidly becoming a major component of junior college education. A document about facilities for police training may illustrate this trend, one only of many kinds of programs in this area (16).

Police training facilities. When we shift our attention to police training offered in addition to the associate degree program, we immediately recognize the need to provide, or have access to, a wide range of specialized facilities and equipment. While some training needs can be met with existing college resources, others will require additional investment in space and equipment. The exact demands will, of course, depend upon the nature of the training to be provided, but the following list suggests some of the requirements associated with the recruit training program (16, p. 23).

Some community oriented junior colleges are fanning up the hopes of the adult educator to a feverish level. In some places (notably the state of North Carolina) we may be

getting educational agencies established with adult education and community service as a fully equal, honorable commitment firmly structured into the institution and nurtured in earnest. These will instantly become the chief adult education agencies in their communities.

A tragic document from William Rainey Harper Junior College probably illustrates the problem in these new institutions, where responsible people want to create significant adult education and public service functions and eagerly desire to plan the campus with that in mind, but they simply cannot see how to go about it. It is sobering to read about their sincere efforts to get a fix on what these adult education functions might be, how enrollment or participation could be estimated and projected, and what this implies for building the campus. Looking to see how others handle this, they discovered that accepted procedure in various states is simply to ignore the problem. So that's what they did. Design for your regular students and all these adult education functions will fit in all right somewhere. Mind you, those people were willing and even eager to do something unusual and excellent, as befits an institution named for the greatest adult education leader of this century. They just couldn't figure out <u>what</u> to do. Depressing reading! A cry for help from this Commission (27, p. 37).

<u>No planning for adult education</u>. The enrollment projections discussed above do not include estimates of enrollment in adult education programs. Because of the great variety of programs typically offered and because of the variations in the duration and scope of adult education programs, enrollment

estimates cannot be made with any degree of accuracy. In states whose community junior colleges institutions have been developing rapidly, new educational facilities, while intended for use for adult education purposes, are not planned on the basis of accommodating anticipated enrollments in this field. In the State of Florida, for example, facilities are explicitly programmed to house the full-time equivalent day students, and adult education programs are accommodated on the basis of available facilities. The State of Illinois is following this example (27, pp. 25-27).

Community use of facilities. A Data Processing Center has been recommended, not only to accommodate college business and college educational programs, but also to provide a resource for use by business and industry in the College District. In addition, the Data Processing Center could provide an important range of services to local municipal and township governments in automating records and analyzing data for planning and programming purposes.

It is anticipated that the Learning Resources Center will receive high community utilization. The Center will house library and reference aids for a variety of community uses, as well as audio-visual materials to assist community organizations in making special program presentations or to aid in the regular conduct of their organizational functions.

A Community Theatre and Auditorium is recommended and is designed for a high level of community use. The auditorium's size determined on the basis of anticipated community requirements as opposed to strictly college

requirements. Similarly, dining facilities in the Student Center has been planned to accommodate luncheon and dinner programs of business and community organizations.

It is suggested that a program be developed for a college club open to all young people irrespective of whether they are formally enrolled (27, pp. 46-48).

Excellence of junior college learning systems. The new junior colleges or the community colleges with 2-year terminal programs are a step ahead in the complete systems approach to education.

I took a trip to California and Florida recently with the president of the new community college at Bergen, N. J. to see some applications of the systems approach to education. There's no doubt in my mind that that's where the action is today. At Florida-Atlantic University, and at Miami-Dade Junior College, a heavy investment has been made in the latest learning resources and AV equipment. We saw innovations there and elsewhere that are pace-setting. Not everything is working out as expected, but they are experimenting.

I'd urge a training director to take a trip down that way if he's contemplating a new facility (32, p. 44).

Colleges and Universities

There is little literature of any consequence on facilities for higher adult education in recent years, beyond the material about residential conference centers. Being more familiar with this area, I will just list off the major

elements of the work with a sentence or two note on facilities commonly available.

Degree and non-credit academic programs. Largely a day at night operation in shared facilities. Urban evening colleges often have separate establishments in the heart of the city. Closing these and withdrawing to the campus, typically at the edge of the city is always, whatever the reasons given, a blow to the adult part-time student. Urban universities, I gather from some of the reports, are now taking seriously the exciting question: How can a city, its usual array of business and cultural institutions and facilities, be used as a learning environment? Some universities now operate programs directly in the ghetto areas. Involvement in urban development has been stimulated by Model Cities, Title I of the Higher Education Act, student volunteer programs and many other forces. A challenging area.

Extension divisions. Shannon's paragraph from his standard introduction to the field sums it up (41). Long mentions the poor distribution of (14) higher education facilities in a Florida county (28). Rindt gives some practical advice on setting up management development classes (38).

Extension facilities. In the performance of their mission, extension divisions operate or use a variety of facilities. First, there must be an administrative headquarters on the central campus. It may be only a single office or suite of offices, or an entire building. Second, there may be an institute and conference building, frequently called a "continuation" or "adult education" center, again on the

central campus. This facility may provide room-and-board accommodations as well as meeting rooms. Third, off-campus centers may have their own buildings; so may evening colleges, the latter often "downtown" in the heart of the city. Where extension does not have its own facilities, it makes arrangements for classroom and conference space wherever it can, hopefully but not necessarily in a building with an educational "image." Local schools, libraries, and auditoriums are used most frequently; but it is not unknown for an extension group to meet in the men's "lounge" of a factory, in a church basement, or even in a bowling alley. If extension has contributed anything to American understanding, it is that ivied halls are not an essential concommitant to learning. However, these egregious surroundings have not made it any easier to assure many faculties that what goes on in them is worthy of a university (41, pp. 35-36.).

Extension centers are operated around the state, typically giving the first two years of the academic curriculum plus other activities. Many of these have separated off to form junior or state college systems. University extension, especially in the mid-west has traditionally been highly visible, often the dominant adult education institution.

In recent years many state universities have finally moved in to serve long neglected urban centers. Some are extremely active and creative in adult education (10, 12).

Conference centers. I have listed a few of the copious reports on residential conference centers. They are primarily descriptive of programs, but the buildings themselves and

their desirable characteristics are often mentioned. These are about the only facilities designed especially for adult education and their impact has been spectacular. No better example of "pay-off" from a relatively trifling investment (some $20,000,000 from the Kellogg Foundation) could be found, for there is now hardly a university in the country that does not have some form of conference center or is not striving to get one. The Kellogg Centers themselves exhibit diverse approaches to differing conceptions of purpose and program, from the hotel-like Michigan State Center to the dispersed buildings at Oklahoma to the small Oxford facility remodeled from old buildings where preserving the old facade was important. The New England Center is a striking innovation intended to serve the universities of a region and including information transmission systems, far out in concept, worthy of a case study by the Commission (35).

Residential conference facilities are of three basic types: on campus separate buildings; use of regular dormitories during the summer or of adjacent hotels; stately houses in off-campus sylvan settings. These are by no means confined to universities, but are often operated by: churches; professional and trade associations (e.g., the experimental center of the American Management Association at Hamilton, N.Y.); hotels and motels; and commercial enterprises specializing in providing facilities or programs or both. Perhaps the Job Corps Centers should be mentioned.

Is all this desirable and efficient? There is no evidence that all this exceedingly high cost residential education is worth in <u>learning</u> what it costs. Does this

matter? Apparently not, since these programs are flourishing. Businessmen are beginning to grumble about the costs, but there are non-learning elements which make these conferences attractive (2,3,4,5,6,11,13,14,49,50).

Variety of Kellogg Centers. The first of the Kellogg-assisted centers was built at Michigan State University in 1951. The Georgia, Nebraska, and Oklahoma Centers followed, each located on the campus of a state university. Two private universities, Chicago and Notre Dame, were then given Kellogg Foundation assistance in establishing centers for Continuing Education on their campuses, and England's Oxford University, another of the great seats of classical learning, was also assisted in developing its "centre" for Continuing Education. Three additional centers are still in planning or construction stages, one a New England Center located on the campus of the University of New Hampshire but representing a consortium effort of the public universities of the six New England states, another an International Center for Continuing Education at Columbia University, and the most recent, "Kellogg West" at California State Polytechnic College, Kellogg-Voorhis Campus, at Pomona.

These ten centers for Continuing Education, financially assisted by the Kellogg Foundation, were conceived of as residential Continuing Education facilities; that is, they are virtually self-contained adult colleges with auditoriums and seminar rooms created especially to serve adult clientele and with comfortably appointed, tastefully decorated modern sleeping rooms and dining facilities. In addition, each of these centers is part of a great university whose total

academic resources constitute the study environment made available to the adult continuing learner (3, p. 2).

Remodeling for conference use. The Kellogg-assisted center at Oxford University in England was different. Frank Jessup, secretary of the Delegacy for Extra-Mural Studies, under whose direction the Center was conceived, put it this way:

> In typical English fashion we have chosen to adapt century-old buildings rather than tear them down and erect new; and certainly in typical Oxford fashion the Centre is planned on a domestic, intimate scale, with accommodation for about fifty resident students (mostly in double study-bedrooms) and a dining room and kitchen able to cater for about seventy. The social heart of the center is the common room, shared by students and faculty; and perhaps it is there, in fact, that the richest educational experience occurs. (3, p. 3).

Costs. Whatever the figures, though, one thing is clear: the building of a center for Continuing Education, such as those assisted financially by the Kellogg Foundation, is not a minor budget item. The University of Nebraska Center came in at approximately $3,000,000, the University of Oklahoma facility cost more than $4,000,000, not including furnishings and equipment, and at the University of Chicago, where the proposal had envisioned a cost of $3,500,000, the initial bids were almost a half million more than budgeted, and, before construction was completed, costs were even higher.

Comfortable, modern furnishings contribute to the high cost of a residential Continuing Education facility. At the University of Georgia, a typical twin bedroom involved $1,237 in furnishings. At the University of Oklahoma, the

total furnishings and equipment cost $332,268. In addition, special equipment compounds the cost. At the University of Georgia, where radio, television and motion pictures were an integral part of the plan, communications equipment alone cost $400,000, and at the University of Notre Dame the cost of the Center for Continuing Education was nearly $3,000,000 (3, pp. 42-43).

Symbolic decor. In summary, every aspect of the Center's four basic units will reflect a special "point of view" but, in so doing, comprise a total complex which suggests the need to integrate state, regional, national and international objectives into new and necessary syntheses not yet clearly visualized. Moreover, the daily traffic pattern of conferees, as participants move from state (housing) to regional (dining) to international (the learning center) environments, reinforces learning theory e.g., as it relates to the need "the integration of educational experience" and the development of "syncretistic thinking," concepts which are critical facets of complex problem solving processes (35, p. 45).

Sylvan centers. Minnowbrook is one of three Syracuse University Adirondack conference centers, the others being the Pinebrook Center on Upper Saranac Lake, and Sagamore Lodge near Raquette Lake. From April to November of each year Syracuse University organizes many types of conferences and educational meetings at these locations. Adults from education, government, business, industry, and the professions participate in programs especially developed for them by the university. Conferences serve groups varying in size from thirty people at Minnowbrook to one hundred at Sagamore, range in duration from one weekend to six weeks, and in subject matter from technical areas of research and engineering to the arts and

liberal education. The Syracuse University programs stress the advantages of combining a residential retreat setting with a specially designed format conducted by highly skilled speakers and discussion leaders (4, p. 9).

Computer simulation in planning. This report is based in part on work done with a computer to determine the feasibility of simulating the operation of the building and to test the validity of the new concepts which are being attempted. A small functioning model of some of the facilities was built and run on the IBM 7040 in the University City Science Center Building. The model was oversimplified and revealed little about the building itself. Nevertheless, the experiment was successful in demonstrating the probable eventual success of such a process as a design tool--to be used when the time comes to detail the exact nature of the project in precise terms (13, p. 23).

Correspondence study. Some 50 universities and hundreds of commercial schools provide c/s to millions, some of it of effective high quality and low cost. In USSR about 40 percent of all degrees are obtained by c/s. Bad image keeps its potential from being fully used here. It is the most unexploited method in the adult educator's bag. What facilities? We find practically nothing in a quite comprehensive retrospective analysis of the c/s literature.

Community development, public service. A crazy quilt of activities carried on by most state and many private universities, ranging from sending faculty consultants to help municipalities in technical problems to deep involvement of

many parts of the university in sustained development campaigns in all regions of the state.

Concerts, lectures, cultural activities. Lecture bureaus, poetry circuits, traveling exhibits, operation of drama centers in old movie theaters, high school competitions in baton twirling, play reading, debates, and a host of other miscellaneous cultural activities go on in many university extension divisions. Small dramatic, often didactic, skits are mounted on trucks to go around to ghetto neighborhoods in the summer. Package libraries. Community pageants. Film lending libraries (45).

PROPRIETARY SCHOOLS

Thousands of private, profit-making schools, including hundreds of correspondence schools, provide training and education ranging from dancing and beautician training to full though unaccredited law degrees. Though some of this is, of course, shoddy exploitation, much of it is standard, indespensible vocational training in private business and technical schools, barber colleges, etc. and some of it is outstandingly excellent and creative. A recent study by Belitsky gives us an analytical and detailed picture of these enterprises, their problems and potential, though he mentions their physical accommodations only incidentally. Many of these schools are small and under-utilized; more students could be accommodated in programs which he suggests have various unique advantages, difficult to duplicate in the public school vocational programs. The blocks to better use are discussed and recommendations made which seem to me both cogent and related to the facilities problem. Long in his study in Brovard County, Florida found the usual diverse array of adult education programs, scattered in the county seemingly at random with little relation to convenience of the user. Higher education facilities alone are in 14 places (28, p. 34).

Temporary schools. Term schools were rather common at one time. They operated as follows: officials of a proprietary school entered a city with a population of 30,000 to 50,000 and met with Chamber of Commerce personnel, industrial leaders and local government officials. They described the operation of the school over a specific time period as well

as their previous successes in other cities. The community leaders saw, at times, the possibility of a school's remaining in the community on a permanent basis if it prospered, and this naturally engendered more interest. Representatives of a local bank were often called in (if they were not already present for discussions), and the bank often agreed to finance tuition payments; this involved setting up installments, and the school, therefore, assumed only a small risk. Some of the students were financed by local business and industrial firms (9, p. 49).

Mobile schools. The mobile schools may either make regular visits to communities throughout a state, or rent space in a community that experiences a sudden upsurge in the need for trained persons. One mobile school, specializing in dental technician training, made regular visits to several communities in the State of Washington. The other type of service occurs when, for instance, a large employer decides to establish a manufacturing plant in a medium-size community that has a low unemployment rate, but may be adjacent to a rural area with underemployed people (9, p. 49).

Expansion potential. On the basis of responses to the questionnaire appearing in Appendix II, 85 percent of the 128 responding NATTS member schools, which generally operate on a year-round basis, would be interested in expanding the size of their student enrollment. According to the responses of NATTS members, plus the estimates of observers of proprietary education, the potential for enrollment expansion among trade and technical schools (and also barbering, business and cosmetology) are probably immense. Only a minority of schools

that offer day and evening sessions operate near capacity in their afternoon classes. This is probably a major reason why the NATTS schools indicated that their capacity enrollment was approximately 100,000. Since the actual number of students attending the schools in 1966 was about 60,000, it would appear that these schools were operating at only 60 percent of their capacity. If this average rate of operations were applied to all trade and technical schools (estimated to number 3,000), the potential expansion in enrollment can be figured at more than 1/2 million students (9, p. 46).

Many small schools. Sixty-six percent of the trade and technical schools had enrollments of 240 or less. Seventy percent of the business schools had enrollments of 400 or less. Eighty-five percent of the cosmetology schools had enrollments of 159 or less. Seventy-five percent of the barber schools had enrollments of 79 or less.

The large number of relatively small private vocational schools implies that their form of education is provided under generally competitive conditions. However, recent expansion in the franchising of schools and the corporate ownership of schools do demonstrate a greater concentration of administrative control (9, p. 13).

Private versus public vocational programs. In any case, a plan that contemplates expansion of the public facilities must reckon with two major costs: a) the expense of adding the new vocational programs; and b) the possible social waste of unutilized or underutilized private facilities. At present, many private vocational schools operate virtually side-by-side with free tuition schools. The former have often been

preferred by students because their training programs are more intensively job-oriented. Therefore, attempts to substitute public training for all of the privately provided training would undoubtedly lead to underutilization in both the public and private schools.

A second reason for continuing viability of the private schools concerns certain of their unique course offerings which could be provided in the public schools only at prohibitive costs. Such highly specialized courses as diamond-setting, dog grooming, meat cutting, time-study engineering and numerous others are of comparatively short duration or would be difficult to integrate into the public school programs. The private schools have also established programs that often enroll only a small number of students at any given time. The schools can profitably offer these courses because they enroll students several times during the year and their training year is practically equivalent to the calendar year; these schools also attract students from other communities, states and even foreign countries, who will return to their homes after completing the training.

In the third place, private schools have the advantage of early experimentation with "new" programs and innovation in methods of instruction and course materials. Their experimentation may be expected to continue as a result of the schools' close ties with business firms and the incentive to maximize profits (9, p. 133).

Poor geographical dispersion. The geographic distribution of educational facilities for adults appears to be out-of-balance.

The northern section of the county appears to be under represented in educational facilities for adults. Only three of the proprietary schools located in Brevard County have facilities in the Titusville area. The three institutions located there include two music schools that teach adults and one flight school. There are no dancing studios, art schools, or business and secretarial schools. Furthermore, only the junior college provides higher education courses, for credit, for residents of the northern area of the county (28, p. 55).

REMARKS

I will spare you rueful reflections on the time I have spent sorting through reports so lacking in information payoff. Luckily, I stumbled on a number of interesting unrelated things along the way and learned a lot about some other matters. For example, the Belitsky report on proprietary schools gives me for the first time a real fix on the state of affairs in that wing of the field. I also got a reality shock about ERIC indexing from this little exercise as a user. Over-detailed indexing turned up about 30 percent of the reports I wasted my time on; they were not worth retrieving.

Some of the things I saw along the way did, however, set me to thinking about our vaporous assignment of doing something about "facilities," "environments," and "systems" in adult education. Since these reflections are simply random notions, I will "share them with you," as we say, "free of charge."

Is there a problem? Keeping to the "buildings" part of this, since the bulk of adult education still involves classrooms, meetings rooms or other traditional learning places, do we (or I) perhaps just imagine there is a big problem? The meagerness of the literature, the dearth of major studies, the lack of any emotional cry of outrage and alarm--does this possibly mean that, by and large, adult educators and trainers have more or less what they need? Concern is expressed; given a check-list of problems, the public school adult educator does mention facilities, but it is way down the list.

And he also mentions that the number of rooms available in the high schools is a challenge to expand the program. Yes, we all would like better quarters, but are we really upset about this?

Or, have we so accepted the necessity of making-do in someone else's quarters that we no longer much expect anything else? I fear this is the true explanation. Therefore, the Commission must present some realistic expectation that something meaningful, or even exciting, can be accomplished. Otherwise, no one is going to settle down to help us with the hard planning work our assignment implies.

Under-use. My mind comes back to all those neighborhood churches. Are they being used for adult education? If no, why not? Is there some substantial true difficulty? Or, is it simply that the local people somehow don't get together? I would like to see a community study, across the agencies, which examines the facility needs of the mix and meld of adult education in that community. My hunch is that the match of need to available space is poor. Also that sharing quarters between adult education programs might be feasible. Clever arrangements very likely exist in various places, which could be written up as models for other communities.

One-half million vocational students could be accommodated now in private schools with training facilities closely simulating on-the-job conditions. This documented fact seems to me to call for action. The causes are complex, involving deep-seated differing views about education, barely concealed rivalries between the private and public sectors, bad habit, ignorance of opportunity, outmoded red tape

built into public education, and other difficulties. Various measures, including jiggling the wording and provisions of federal legislation, are being taken. What would be the Commission's role in such matters? How many of us understand them?

Case studies of need. In the Harper College document we read of the troubles of planners who cannot get a good picture of the needs of the adult education element. This is widespread, you can depend on it. If they knew what we want, they could and would provide it, often at little or no extra cost.

Hick's study of public school facilities needs in New York and his effort to develop a manual for planning shows the kind of work we should try to promote on a more ambitious scale in many partsof the field.

Could we get NAPSAE, AAJC, NUEA, et. al. to help us promote such studies? All adult education programs, of course, are unique in some ways and their personalities must be reflected in their accommodations; nonetheless, powerful commonalities run through programs in similar institutions where standard, or at least typical, quarters could be recommended.

Given an actionable statement of needs, technical information can be assembled in no time. What is the most durable carpet? How much light? Cost of air conditioning? All that is known already and could be packaged for the adult education planner. From this would quickly follow:

Case studies of solutions. Even now there are some outstandingly good adult education facilities, whether especially designed, or adapted to that purpose. The Kellogg Centers are only the most dramatic examples, but there must be others. Some adult basic education centers in old schools or in storefronts must be better worked out than others; some companies have training facilities far ahead of the rest of the field; the Communicable Disease Center of the U. S. Public Health Department has an outstanding learning center in Atlanta; and there are others. A modest series of case studies of these might set others to thinking about the problem and the possibilities. The Kellogg Centers, in large part because they are attractive, publicized, and highly visible, have set off a revolution in residential education.

Lack of capital/cost problems. How would adult education facilities be financed? No adult education agency ever has ten cents for capital investment. We are mainly familiar with this lack as it inhibits the development of new programs which typically take a year or two of nurture before they pay their own way, but it no doubt also prevents construction or expansion of facilities in many cases. The documents suggest that business and industry are reluctant to invest in this also. On the other hand, by and large, adult education is self-supporting from fees and in many instances is a lucrative profit maker. This profit making is not confined to proprietary schools; many university evening colleges return large revenues to the general fund of the university. Are there any Federal programs providing funds, subsidy or low cost loans for this purpose? Given the "payoff" from Kellogg investments in residential centers, would any other foundation take an interest? The finance

problem might be explored by the Commission. If we had money, what would adult educators do with it?

What is environment? My literature review and comments are related to the provision of conventional physical facilities in adult education. What is implied by "environment" in the title of the Commission? I do not know. I expect we can make it mean whatever we like--from the temperature in the classroom to the climate of adult education in the nation. In our work at ERIC/AE we use the term "learning environment" as a reaction to the careless use of the term "method." Residential education, for example, is not to our minds a "method," but rather a setting or environment in which many methods may be used. Community development is not a method, rather a mix of method and techniques isolated for discussion because the setting of the learning is somewhere out there in the community. "Classroom environment" is a familiar term. Such useages typically point to the emotional or feeling tone of an educational experience as in the "climate of the group." Or to the general style of learning or teaching as in "democratic leadership" or "student oriented." To isolate environmental factors (which I do not doubt are important) for study is a subtle research problem and I doubt there are five studies in the adult education literature attempting it.

Learning in a classroom or group situation (of which residence is a variant) does, it seems to me, differ from learning through participation in community activities or in a natural work environment or in isolation, as in correspondence study or TV learning by individuals in their homes. (This latter is sometimes called "dispersed learning," such is the

grip of the idea that learning is naturally in a group as we all knew it in school.) These seem to me logically to exhaust the possible settings or environments of learning. If we really could sort out what kinds of learning are best accomplished in what settings and by what methods, that would quickly revolutionize the field.

Consider one example only. I will dogmatically assert that at least one-third of the adult learning now going on in classes, lectures, discussions, residential centers and any other group situation could be done by correspondence study, at least as well and at less cost. I can muster a powerful body of research evidence for this assertion. Those who doubt it will have a hard time finding any research to support their position. I think failure fully to exploit correspondence study is a scandal of American education. Forty percent of all college degrees in Russia are earned by correspondence. If whatever is blocking fuller use of correspondence could be overcome, that might in itself alleviate any shortage of classrooms, lecture halls, etc.

I am a friend and supporter of residential adult education, but I know my mind is swayed by admiration of the Scandinavian social movement antecedents, the enthusiasm of my colleagues and by the elegance of those Kellogg Centers. With John Kiekhoff, however, I question that the learning justifies the high costs; we are taking it on faith, without evidence.

The point of this is that we know little, despite some tons of research reports in ERIC/AE, about how to fit the method to the learning need. We share this ignorance with all other levels of education where old assumptions are falling every day. How then can we devise efficient learning environments?

Well, I hear you saying, "If we read all that into "environment," nothing will ever be done." I certainly agree. What we probably must mean by environment is simply those factors, closely related to physical facilities or to the use of media based learning systems, which are less tangible than others. It could be thrown out of the Commission's title, which is unduly engulfing and pretentious anyhow.

What is "system." The average adult educator reacts with carefully concealed horror to this word. We know it is this year's most fashionable good word and we're reasonably sure we understand it. It is only common sense flossed up a bit. It is much like the Tyler method of curriculum development, everything considered in its turn. And we have our own version in the "eight steps of program planning." But its connotations are threatening--all those arrows, PERT, computers?--and, worst of all, possible confrontation with failure if the educational objectives which are the organizing principles of our "systems" must, in fact, be measurable.

If our purpose is the verifiable delivery of effective education, then buildings, classrooms, TV set-ups, multimedia contraptions, etc. cannot be systems. They can only be

components of broader systems which include instructional objectives, the content of learning and its organization, etc. These various devices and objects, however, may well be integrated into organized sub-systems, amenable to study. Instructional systems, needless to say, can be studied or developed at any level of complexity. OE is trying to build a system to make all American literate. Bristol Labs has integrated systems to up-date salesmen on the latest drugs. What level are we talking about?

If the Commission is to get into promotion of the "systems approach" in adult education and training, and I personally think this much more profitable than further worry about architecture, building, etc., then we may want to begin by explaining it in non-threatening manner. An excellent essay by Gagne in ERIC/AE files could be reprinted or brought forward for this purpose. Case studies, again, are promising and feasible. Some examples exist in the literature, mostly from industrial and military training; others can be adapted from other areas of education, e.g., a description of the University of Pittsburgh Individually Prescribed Instruction (IPI) system for elementary reading, which some are already adapting to adult basic education. Other work is being done that could be written up.

<u>More literature searches</u>? Disenchanted as I am by what I found in this search, I definitely recommend similar searches on any more tangible topics we decide to work on. I do not volunteer to do them, but ERIC/AE will give all possible help to others.

Our problem, as I see it, is finding some actionable part of a vast area where thousands of studies and other efforts need to be made. A series of case studies of needs in various parts of the field or case studies of effective and imaginative use of new media may be the simple kinds of projects we should start with. Either could be worked up into a research proposal or part of a larger proposal for OE or some foundation. Any tangible work of this type will quickly lead to involvement of many expert persons and agencies and to reports that could sustain a conference to whip up further effort.

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   The adult basic education (ABE) programs currently conducted by non-governmental organizations in the United States, are reviewed in this document. Attention is focused on the significance of voluntary efforts in adult basic education programs; and strengths and weaknesses, gaps between need and resources, and limiting factors are identified. Programs in all but ten states are examined from all or some of the following viewpoints: year established, form of management, geographical areas served, affiliation, program staff, desirable preparation for teaching ABE, volunteers as teachers, location of buildings, facilities and equipment, limiting factors in ABE, government funds, staff participation, and student characteristics. This is the first attempt to make a systematic assessment of ABE in the United States.

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   This book deals with university continuing education centers emphasizing those at ten pioneering institutions (Michigan State University, Columbia, Oxford, California Polytechnic State College, Notre Dame, University of Chicago, and the Universities of Georgia, Nebraska, Oklahoma, and New Hampshire) that came into being through the financial assistance of the W. K. Kellogg Foundation. These centers contain auditoriums, conference rooms, and sleeping and dining accommodations; they are each part of a university whose total academic resources are available to the adult learner. The role and background of continuing education centers, origins of the centers described here, the design and financing of facilities, program planning and presentation (including special degree programs), the use of research and staff training to improve continuing education, approaches to program administration and finance, and anticipated trends in residential continuing education are discussed and documented.

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A brief history of the development of a Detroit Institute of Technology centers on existing buildings acquired by the Institute. The present situation is discussed in terms of the resources available to an inner-city student, the types and number of students served, and the present adapted facilities -- assignable gross space and space utilization. Photographs and diagrams illustrate student activities, classroom conversion, architectural aspects. Criteria for future planning are listed and are based on the relation between the advantages of the inner-city institute and student needs. Standards for future facility needs are listed for academic, housing, research, recreational and parking in light of various site alternatives available.

13. A CENTER FOR CONFERENCES AND CONTINUING EDUCATION. Caudill, Rowlett, Scott and Associates Bryan, Texas; University City Science Center, Philadelphia, Penna. EDRS Order Number ED 019 833, price MF $0.25, HC $2.20. 42p. October 1966.

The design of this facility for a proposed science center began with an analysis of communicative networks and other related conceptual implements. Emphasized were: (1) functional resource location, (2) information exchange, (3) complimentary facilities, (4) adaptation to activity, (5) electronic communications and space and (6) adaptive flexibility. Adaptation of the building to site and area conditions, along with solution of functional and structural problems, comprise a secondary design phase. Simulated building operation was analyzed by a prototype computer program. Sketches and diagrams are included to illustrate important concepts.

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The purposes of this study of adult education programs in Brevard County, Florida, where the residents had an unusually high educational achievement and income, were to (1) determine who sponsored the adult educational activities in the county, (2) obtain a quantitative measure of the participation of adults (3) determine what kinds of activities were offered by the different institutions, and (4) note trends in the development of facilities. Forty-nine organizations, agencies and institutions identified as sponsoring adult education returned questionnaires. Activities were spread among state universities, private colleges, a junior college, proprietary schools, governmental agencies, YMCA's, libraries, and the American Red Cross. Distribution of the programs by such classifications as academic, homemaking and vocational, showed that institutions reflected special purposes. Geographic distribution of facilities appeared out of balance and there was a high incidence of sharing physical facilities. Projections of expected enrollments suggested development needs for the county.

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Contemporary adult education in the United States today is examined by means of a national sample survey. In this monograph, adult learning is approached from a social-psychological vantage point--the needs, motives, and satisfactions which impel adults to seek to learn some subject. The organization of adult education is considered only insofar as such organization facilitates or hinders individuals in the pursuit of learning. The extent and nature of adult participation in continuing education are reviewed, the people who engage in these pursuits are identified, the situations, circumstances, and personal goals which influence people to become involved in educational endeavors are reconstructed, the national climate of opinion regarding education for adults is looked at, and to a lesser degree, the range of facilities available for the instruction of the adult population is investigated. Aldine Publishing Company, Chicago, Illinois.

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A proposal by the University of New Hampshire is set forth for a New England regional continuing education center exemplifying cooperation among institutions, international concern, interdisciplinary instruction and evaluation, and independent study. Over 30 proposed topics for regional, state, and international conference programs are listed, together with selected physical and curricular elements and financing and budget formulas. Appendixes include possible topics for 150 additional conferences, meetings, and institutes: suggestions by the New England Board of Higher Education; regional programs proposed by University of New Hampshire faculty and others; preliminary plans for the Durham Seminar in Atlantic Community Studies; and elaboration of the Atlantic Community idea; the anticipated role

of WENH-TV; preconference and post conference audiovisual services; a proposed university organization for coordinating external service and education; preparation of specialists in adult education; and proposals relating to the visual and performing arts, resource development, higher education, gerontology, and continuing medical education.

36. CHANGING PATTERNS IN CONTINUING EDUCATION FOR BUSINESS. CSLEA REPORTS. Olean, Sally J. Center for the Study of Liberal Education for Adults. EDRS Order Number ED 012 428, price MF $0.50, HC $4.70. 92p. 1967.

After World War II, business and industry moved into the adult education field, now spending a reported 20 billion dollars annually in higher education for their scientific personnel and management. Large industries, like IBM, have complete educational programs and facilities for their personnel. Ford and General Motors use outside educational groups for executive development programs. Companies, such as Continental Can, have a small headquarters educational staff administering decentralized programs, either using their own programs, or participating in programs available locally at colleges or universities. The American Bankers Association and the American College of Life Underwriters have their own programs. Some companies use such unaffiliated educational organizations as the American Management association or the National Industrial Conference Board. With better communication between universities and business, the universities could set the conceptual framework for long-duration education, provide short-range, immediate pay-off education, evaluate company-sponsored programs and investigate new technology and methods for teaching adults.

37. DEVELOPMENT PROSPECTUS. THE ART OF THE POSSIBLE. Ricks and Kendrick, Fort Walton Beach, Florida. Florida State Department of Education, Tallahassee. EDRS Order Number ED 020 634, price MF $1.00, HC $11.15. 1963.

The creation of a development prospectus for the growth of a permanent campus for the Oklaoosa-Walton Junior College is described. Facility requirements were influenced by an analysis of factors related to present and projected enrollments. Factors included the number of students in present and projected degree programs and a population projection for area served by OWJC. The educational specifications were determined by an analysis of the types of learning activities and services, and the relation of these activities and services to space utilization. Particular attention was given to facilities requirements for adult education programs. A discussion of the site analysis, site utilization, and architec-

tural concepts linking beauty and function is given. Numerous graphics illustrate these concepts.

38. HANDBOOK FOR COORDINATORS OF MANAGEMENT AND OTHER ADULT EDUCATION PROGRAMS. Rindt, Kenneth E. Wisconsin University, Madison, University Extension. Available from Bookstore, University Extension, University of Wisconsin, 432 North Lake Street, Madison, Wisconsin 53706, price $2.50. 122p. 1968.

This handbook is planned for both new and experienced coordinators of management and other adult education programs, for school or adult education administrators, training directors, instructors, or speakers. Part Two, covering planning and organization, discusses finding the needs to set program goals; developing curriculum and methods; staffing; facilities, equipment, and materials; and promotion. Appendixes include a facilities inventory, available locations, room setups, and a promotional letter.

39. AREA VOCATIONAL SCHOOLS. Russo, Michael. Unted States Office of Education, Washington, D. C. Agricultural Education Branch. EDRS Order Number ED 024 247, price MF $0.25; HC available from United States Government Printing Office, price $0.15. In AMERICAN EDUCATION; June 1966. 7p.

This description of the DeKalb Area Technical School near Clarkston, Georgia serves as a guide on methods of developing curriculums and facilities for such schools. The classrooms, laboratories and shops are described with photographic illustrations of the course offerings to daytime and nighttime students.

40. OPERATIONAL RETRIEVAL, THE BASIC EDUCATION COMPONENT OF EXPERIMENTAL AND DEMONSTRATION PROJECTS (E/D) FOR DISADVANTAGED YOUTHS. Sexton, Patricia Cayo. New York University, New York. United States Department of Labor, sponsor. EDRS Order Number ED 018 744, price MF $0.50, HC $3.05. 59p.

41. UNIVERSITY EXTENSION. The Library of Education. Shannon, Theodore J. and Schoenfeld, Clarence A. Center for Applied Research in Education, Inc. New York. 115p. 1965.

42. ADMINISTRATION OF CONTINUING EDUCATION: A GUIDE FOR ADMINISTRATORS. Shaw, Nathan C., Editor. National Association for Public School Adult Education, Washington, D. C. Available from Publications-

Sales Section, National Education Association, 1201 Sixteenth Street, N.W., Washington, D. C. 20036. Price, paper $6.00; HC $8.00. 442p. 1969.

43. OHIO SENIOR CITIZENS CENTERS. Stellman, Samuel David. Ohio State University, Columbus. University Microfilms, Order Number 63-6265, price MF $2.75, Xerography $8.00. Ph.D.Thesis. 175p.

The study aims to discover information which can be used to establish guidelines for senior citizens' centers. Many centers have been initiated in communities because the need was obvious and often urgent. However, the lack of sound financial planning caused difficulty early in their developing stages. Financing of centers remains a major concern throughout the state. At present, in spite of the large number of aging people, there is still space in most centers for additional members. Most center members today are people in the lower income categories of the aging population, widowed, over 70 years of age, who have little education; the more affluent and "younger" aging do not use the senior citizens' centers to any great extent. The personnel operating these centers lack expertise in catering to their clientele and have been unable to interest their participants in adult education courses. However, recreational activities continue to be popular with those who attend.

44. SWEET SUCCESS MARKS A FACTORY-TO-SCHOOL CONVERSION. WESTINGHOUSE AREA VOCATIONAL HIGH SCHOOL. Chicago, Illinois. Sullivan, Raphael P. In SCHOOL SHOP; v28 n8 p107-110 April 1969.

45. AN INVESTIGATION OF EXISTING OUTDOOR DRAMA TECHNIQUES AND A DETERMINATION OF METHODS TO IMPROVE TRAINING. Research Report. Sumner, Mark R. North Carolina University, Chapel Hill, Institute of Outdoor Drama. EDRS Order Number ED 016 895, price MF $0.75, HC $6.75. 133p. 1967.

An investigation was made of techniques and procedures used in long term community sponsored epic presentations by major outdoor historical and classical drama companies operating in the United States. The principal findings are based on 83 on the spot surveys and interviews with directors and staff members of twenty outdoor drama companies during summer operations. A review was made of 33 performances and 24 productions of outdoor drama in locations throughout the nation. Nineteen plays were historical and 16 of these were written specifically for the locale of presentation. Advance

planning procedures, organization, writing of plays, amphitheater costs, audiences, company operation, the feasibility, scope and costs of production, special problems of outdoor production, and rehearsals and performance were considered, together with suggestions for special training in speech, physical movement, background research, and discipline for performers in college drama courses.

46. EVALUATION OF THE ADULT LEARNING CENTER OF ELIZABETHPORT BY STAFF AND PARTICIPANTS, OPERATIONS FROM 2/26/68 - 4/30/68. Tatum, William and Chasnoff, Robert. EDRS Order Number ED 019 610, price MF $0.25, HC $1.05. 19p. 1968.

Activities, facilities, and programmed reading materials at the Adult Learning Center of Elizabethport (Elizabeth, New Jersey) were evaluated in 1968 by staff members and participants. Staff members saw such factors as a relaxed atmosphere, counseling and placement, the teachers' effectiveness in working with students, and the quality and variety of programs available at each level in reading, mathematics, English, and other subjects, as virtues of the Center. However, weaknesses were noted in facilities, staffing, teacher preparation, and class management, and various improvements were suggested. Most were satisfied with materials, facilities, and instruction, but a need was expressed for more space, noise control, and help for Spanish speaking persons. The document includes statistics on attendance, testing services, and population characteristics.

47. PUBLIC SCHOOL ADULT EDUCATION, A GUIDE FOR ADMINISTRATORS. Revised Edition. Thatcher, John H. National Association of Public School Adult Educators, 1201 Sixteenth Street, Northwest, Washington, D.C. 20036. 212p. 1963.

This revised edition of "Public School Adult Education" deals with concepts and elements of public school adult education and with administrative responsibilities, problems, and practices. It contains new chapters on curriculum psychology of adult learning, evaluation, and educational tests for adults.

48. EVALUATING TRAINING AND DEVELOPMENT SYSTEMS. Tracey, William R. Available from American Management Association, 135 West 50th Street, New York, New York 10020. Price $17.25. 304p. 1968.

This training and development manual discusses guiding principles and elements of evaluation: (1) philosophy and goals; (2) administrative planning, organization, staffing, direction, and control; (3) plant and facilities; (4) staff and faculty composition, qualifications, screening and selection, promotion, duties, compensation, and incentives; (5) determination of needs, systems development and validation, and other facets of curriculum planning; and (6) instruc-

tional support (including instructor training and training aids and materials). More than 200 detailed analysis sheets are provided.

49. CAMPUS CONTINUING EDUCATION CENTER, OUTLINE PROGRAM. Washington University, Seattle. Continuing Education. EDRS Order Number ED 010 674, price MF $0.50, HC $5.35. charts. mimeo. 105p. March 1966.

50. REMOTE CONTINUING EDUCATION CENTER, OUTLINE PROGRAM. Washington University, Seattle. Continuing Education. EDRS Order Number ED 010 673, price MF $0.50, HC $3.45. charts. mimeo. 67p. September 1966.

A proposal is made for a remote continuing education center in a secluded area near Manchester, Washington. It would be complementary to an adjacent marine biology research center. The optimum capacity suggested is for 60 persons over night and 150 for daily instruction and dining. Facilities should include lecture, seminar and committee rooms, a library, dining rooms, kitchen, living units, lounge and administrative areas, parking, and separate cabins for faculty, researchers, and distinguished visitors. Outdoor recreational facilities would be provided. Future developments and expansion are taken into account.

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